

Small Particle Reagent

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Small Particle Reagent

1 INTRODUCTION

- A. Small Particle Reagent is an aqueous suspension used by FBI Laboratory Friction Ridge Discipline personnel to develop sebaceous latent prints on submerged firearms.
- B. Small Particle Reagent is commercially available and only white or black (dark) formulations are acceptable.

2 EQUIPMENT

Small Particle Reagent (White or Black/Dark)

3 STANDARDS AND CONTROLS

See *Processing Overview* ([FRD-300](#)).

4 LIMITATIONS

Developed prints will be preserved immediately as drying of the item may cause the prints to fade and rust formation can be detrimental to firearms examinations.

5 PROCEDURE

5.1 Application

Personnel will use only premade suspensions of Small Particle Reagent.

- A. Personnel will complete the following steps in order:
 - 1. Prepare the working suspension following the manufacturer's instructions.
 - i. Container should be frequently shaken during processing to re-suspend solids.
 - 2. Remove firearm from water.
 - i. Do not dry the item.
 - 3. Use the Small Particle Reagent suspension according to the manufacturer's instructions.
 - i. If development is not sufficient, the Small Particle Reagent suspension can be reapplied to the item.
- B. Capture appropriate friction ridge details as applicable (digitally or photographically).
- C. Ensure the firearm is stored in water and avoid exposure to air when not processing or capturing detail.
- D. A copy of the instructions, to include the manufacturer and Lot number (if available), will be retained in the FBI Laboratory File.

5.2 Storage

Small Particle Reagent solutions can be stored in original containers.

5.3 Shelf Life

- A. Small Particle Reagent suspensions can be used provided the reagent checks are satisfactory.
- B. If the working suspension is separated, shake vigorously.
 - 1. If the Small Particle Reagent does not return to suspension, discard the suspension.

6 SAFETY

See [FBI Laboratory Safety Manual](#) for appropriate information.

7 REVISION HISTORY

Revision	Issued	Changes
03	07/15/2021	Replace Latent Print Units with Friction Ridge Discipline. Minor wording changes. Streamline equipment list. Re-organization and re-numbering of sections. Section 1 - Removed brand name. Section 4.3 - modified shelf life. Section 5 - added reference to Preamble.
04	08/01/2022	Reformatted Changed "solution" to "suspension" throughout